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09/816,348	03/26/2001	Masaharu Tomiyama	Q63433	6359

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EXAMINER

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ART UNIT	PAPER NUMBER
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2834

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Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 0603

Application Number: 09/816,348
Filing Date: March 26, 2001
Appellant(s): TOMIYAMA ET AL.

Tomiyama et al.
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 4/15/03.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 1-4 and 6-11 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

5,576,588

Moribayashi et al.

11-1996

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 6-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Moribayashi et al.

Regarding claim 1, Moribayashi et al. show a motor (Figures 19, 31 and 32) for driving a blower fan (intended use) comprising:

- A cylindrical case body (41) having a front end opening portion and a rear end opening portion;
- A rear end plate (34/37) fixed on the rear end opening portion of the case body, the rear end plate having a first bearing;
- A front end plate (34/37) fixed on the front end opening portion of the case body, the front end plate having a second bearing;
- A rotary drive shaft (26) inserted into the central portion of the case body, the rotary drive shaft whose rear end portion is rotatably supported on the rear end plate through the first bearing and whose forward middle portion is rotatably supported on the front end plate through the second bearing;
- A rotor (27) fixed on the middle portion of the rotary drive shaft;
- A stator (18) fixed on the inner circumferential surface of the case body to face to the outer circumferential surface of the rotor; and
- A reinforcing portion provided in the vicinity of an end portion of the stator,

- Wherein the reinforcing ring (45) including a ring portion and a cylinder portion (45a, 45b, 45c) extending from an outer peripheral edge of the ring portion.

Regarding claim 2, it is noted that Moribayashi et al. also show the reinforcing portion (45 and/or 43, Figure 33) being integrally formed with the case body (41).

Regarding claim 3, it is noted that Moribayashi et al. also show the reinforcing portion reinforcing a portion of the case body fixing the stator not to be deformed.

Regarding claim 4, it is noted that Moribayashi et al. also show the ring portion being made of hard material (metal), and the ring portion being fixed on a part of the inner circumferential surface of the case body and formed into an annular shape as a whole.

Regarding claim 6, it is noted that Moribayashi et al. also show a length in the diametrical direction of the ring portion being no less than the thickness of the stator fixed on the inner circumferential surface of the case body (Figure 32).

Regarding claim 7, it is noted that Moribayashi et al. also show that before the ring portion is fixed, the outer circumferential surface of the cylinder portion has a conic surface inclined in a direction such that a diameter increases large as a distance from the ring portion increases. (Plate 45 must be punched out and bent before fixing into the case body 41.)

Regarding claim 8, it is noted that Moribayashi et al. also show the ring portion being fixed by press fitting on a part of the inner circumferential surface of the case body.

Regarding claim 9, it is noted that Moribayashi et al. also show an outer surface of the cylinder portion engaging with an inner circumferential surface of the case body.

Regarding claim 10, it is noted that Moribayashi et al. also show the reinforce portion being disposed in the case body so that the cylinder portion extends from the ring portion in a direction away from the stator, so that the ring portion is disposed between the cylinder portion and the stator (45c in Figure 31 extending away from the permanent magnets 42).

Regarding claim 11, it is noted that Moribayashi et al. also show a motor (Figures 19 and 33) for driving a blower fan (intended use) comprising:

- A cylindrical case body (16) having a front end opening portion and a rear end opening portion;
- A rear end plate (34/37) fixed on the rear end opening portion of the case body, the rear end plate having a first bearing;
- A front end plate (34/37) fixed on the front end opening portion of the case body, the front end plate having a second bearing;
- A rotary drive shaft (26) inserted into the central portion of the case body, the rotary drive shaft whose rear end portion is rotatably supported on the rear end plate through the first bearing and whose forward middle portion is rotatably supported on the front end plate through the second bearing;
- A rotor (27) fixed on the middle portion of the rotary drive shaft;
- A stator (18) fixed on the inner circumferential surface of the case body to face to the outer circumferential surface of the rotor; and

- A reinforcing portion (19, 43 and/or 45 in Figures 19 and 33) provided in the vicinity of an end portion of the stator,
- Wherein the reinforcing portion (19, 43, 45) including bent portions that are formed by end portions of the case body that are bent toward an inside thereof, intermittently around an inner circumferential surface thereof, wherein said bent portions have U-shape (looking into the paper in Figure 19, looking radially for 43, and looking axially for 45b), and the stator is fixed at a portion of the inner circumferential surface of the case body which corresponds to a base portion of the U-shape.

(11) Response to Argument

The applicant's arguments are on the ground that Moribayashi fails to disclose the reinforcing portion with a cylinder portion as recited in claim 1, the reinforcing portion being integral with the case body as recited in claim 2, an inclined conic surface of a cylinder portion of the reinforcing portion as recited in claim 7, a cylinder portion extending from the ring portion in a direction away from the stator as recited in claim 10, and bent portions of the case body as recited in claim 11.

First of all, it is noted that the holder plate 45 in Figure 28 of Moribayashi et al. not only retains the permanent magnets in an axial direction but also strengthens the housing 41 while the reinforcing portion 22 in Figure 2 of the present application can only strengthen the housing 1.

Regarding claim 1, Figures 28-33 of Moribayashi et al. show the reinforcing portion 45 with a ring portion and a cylinder portion extending from the outer peripheral

edge of the ring portion. The cylinder portion does not have to be continuous. The cylinder portion of Moribayashi et al. includes three different bent portions 45c, 45a, and 45b in Figure 28. The bent portions with holes 45c are for engaging with portions 41c of the case body 41 in Figure 31. The bent portions 45a are for engaging the permanent magnets 42 axially in Figure 30. The bent portions 45b are for engaging the sides of the permanent magnet 42 in Figure 29. In addition, claim 1 is an open-ended claim and it does not exclude the fact that the cylinder portion of the present application might be divided into separate portions. It is also noted that during examination, the pending claims must be "given the broadest reasonable interpretation."

Regarding claim 2, Figures 28-33 of Moribayashi et al. show the reinforcing portion 45 being integral formed with the case body 41 because they are connected together at 41c and 45c. (It is noted that a door can be said to be integral formed with a frame if it is mounted to the frame with hinges.) In fact, the applicant tried to claim the feature of Figure 13, reference numerals 30 totaling two portions. However, Figure 33 of Moribayashi et al. also show a similar feature with reference numerals 43 totaling six portions for six permanent magnets. (It is further noted that in the art of motor and generator the number of magnets in a stator can be two or any other number.) Portions 43 in Figure 33 not only retain the permanent magnets in an axial direction but also strengthen the case body 41.

Regarding claim 7, it is noted that before the reinforcing portion 45 is inserted into the case body 41, it must be punched out and bent in order to create portions with holes 45c, portions with spacer 45b, and spring portions 45a. During the bending

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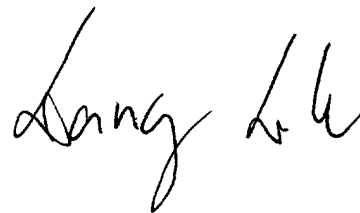
process, those portions must have a conic surface inclined so that the diameter increases as it moves away from the ring portion. Therefore, Moribayashi et al. disclose this feature.

Regarding claim 10, the portions with holes 45c clearly extend from the ring portion in a direction away from the stator. See Figures 29 and 30.

Regarding claim 11, it is noted that the claimed subject matters in this claim read upon three features of Moribayashi et al. disclosed in Figures 19 and 33. Portions 19 in Figure 19 having a U-shape if looking directly into the paper. Portions 43 in Figure 33 at the end of the case body 41 with two side tabs for holding the permanent magnets having a U-shape if looking radially. Portions with two side tabs 45b also are formed by (near) end portion of the case body having a U-shape if looking axially. In addition, portions 43 in Figure 33 of Moribayashi et al. show a similar feature regarding of portions 30 in Figure 13 of the present application.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



July 14, 2003

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